

What is claimed is:

- 1) A fiber blend for filter media use, comprising: a blend of electret fibers and dissimilar non-electret fibers, said electret fibers present from about 15 to about 97 weight % of said blend, and said dissimilar non-electret fibers present from about 3 to about 85 weight % of said blend, and said electret fibers having from about 0.05 to about 30 weight % of charge control agent, based on said weight of said electret fibers.
- 2) The fiber blend of claim 1, wherein said electret fibers are homopolymer or copolymer fibers, or heterofilaments.
- 3) The fiber blend of claim 2, wherein said blend is bonded by a mechanical process, a chemical process, or a thermal bonding process.
- 4) The fiber blend of claim 3, wherein said mechanical process is by needle punching or hydroentangling.
- 5) The fiber blend of claim 3, wherein said chemical process is by latex resin bonding or hot melt adhesives bonding.
- 6) The fiber blend of claim 3, wherein said thermal bonding process employs low melt polymer fibers, bicomponent fibers, or a mixture of these.
- 7) The fiber blend of claim 6, wherein said thermal bonding process employs bicomponent fibers and said bicomponent fibers comprises from about 3 to about 50 weight % of said blend.

8) The fiber blend of claim 1, wherein said electret fibers are selected from the class of polytetrafluoroethylene (Teflon), polyolefin, polyurethane, polyester, polycarbonate, or a mixture of two or more of these.

9) The fiber blend of claim 1, wherein said non-electret fibers are selected from the class of polyolefin, polyacrylates, polyacrylonitrile, polystyrene, fluoropolymers, polyesters, polyurethane, polycarbonates, polyamides, polyimides, polyetherketones, polyacetals, or a mixture of two or more of these.

10) The fiber blend of claim 1, wherein said charge control agent is selected from the class of triphenylmethanes; ammonium and immonium compounds; fluorinated ammonium and immonium compounds; bis-cationic acid amides; polymeric ammonium compounds; diallylammonium compounds; arylsulfide derivatives; phenol derivatives; phosphonium compounds and fluorinated phosphonium compounds; calix(n)arenes; metal complex compounds; benzimidazolones; and azines, thiazines or oxazines which are listed in the Color Index as Pigments, Solvent Dyes, Basic Dyes or Acid Dyes, and Copy Blue and Copy Charge.

11) The fiber blend of claim 10, wherein said charge control agent is Copy Blue PR.

12) The fiber blend of claim 10, wherein said charge control agent is Copy Charge NY VP 2351.

13) The fiber blend of claim 1, wherein said electret fibers are polypropylene fibers.

14) The fiber blend of claim 13 wherein said non-electret fibers are polyethylene terephthalate fibers.

15) The fiber blend of claim 14, wherein said charge control agent is Copy Blue PR or Copy Charge NY VP 2145.

16) The fiber blend of claim 1, wherein said electret fibers are charged.

17) A web for filter media having sufficient rigidity to maintain its shape, comprising a bonded blend of electret fibers and dissimilar non-electret fibers, said electret fibers present from about 15 to about 97 weight % of said blend, and said dissimilar non-electret fibers present from about 3 to about 85 weight % of said blend, and said electret fibers having from about 0.05 to about 30 weight % of charge control agent, based on said weight of said electret fibers.

18) The web of claim 17, wherein said electret fibers are homopolymer or copolymer fibers, or heterofilaments.

19) The web of claim 18, wherein said bonding is by a mechanical process, a chemical process, or a thermal bonding process.

20) The web of claim 19, wherein said mechanical process is by needle punching or hydroentangling.

21) The web of claim 19, wherein said chemical process is by latex resin bonding or hot melt adhesives bonding.

22) The web of claim 19, wherein said thermal bonding process employs low melt polymer fibers, bicomponent fibers, or a mixture thereof.

23) The web of claim 22, wherein said thermal bonding process employs bicomponent fibers and said bicomponent fibers comprises from about 3 to about 50 weight % of said blend.

24) The web of claim 17, wherein said electret fibers are selected from the class of polytetrafluoroethylene (Teflon), polyolefin, polyurethane, polyester, polycarbonate, or a mixture of two or more of these.

25) The web of claim 17, wherein said non-electret fibers are selected from the class of polyolefin, polyacrylates, polyacrylonitrile, polystyrene, fluoropolymers, polyesters, polyurethane, polycarbonates, polyamides, polyimides, polyetherketones, polyacetals, or a mixture of two or more of these.

26) The web of claim 17, wherein said charge control agent is selected from the class of triphenylmethanes; ammonium and immonium compounds; fluorinated ammonium and immonium compounds; bis-cationic acid amides; polymeric ammonium compounds; diallylammonium compounds; arylsulfide derivatives; phenol derivatives; phosphonium compounds and fluorinated phosphonium compounds; calix(n)arenes; metal complex compounds; benzimidazolones; and azines, thiazines or oxazines which are listed in the Color Index as Pigments, Solvent Dyes, Basic Dyes or Acid Dyes, and Copy Blue and Copy Charge.

27) The web of claim 17, wherein said electret fibers are charged.